

Support for the  
Implementation  
of Essential Skills Wales

Planning Documents: Application of Number

Entry level 1 – Level 4

## Section 2 – Planning

This section contains planning documents for each of the three ESW qualifications in Communication, Application of Number and ICT at levels Entry 1 – Level 4. These documents are useful in identifying opportunities for assessment of relevant skills. In many instances it may be helpful for learners to negotiate the most appropriate opportunities in the aim of promoting a learner-centred approach/candidate ownership. At the higher levels this is a requirement.

In addition, a range of opportunities for teaching and learning should also be identified and made explicit to candidates in order to promote effective skill development and transfer. It is important to note that teaching and learning should not be 'assessment driven'.

### Using the Grids

- Text presented in red should be replaced with suggested context/topic or by deleting an option, as appropriate. In some instances it may be necessary to identify more than one opportunity, or to add more detail.
- Pertinent aspects of performance criteria detailed in the first column have been underlined.
- Activities or tasks may be connected with education, training, work and social roles.

NB A template only is provided for Level 4 since candidates must independently decide upon relevant strategies

## ESW PLANNING DOCUMENTS – APPLICATION OF NUMBER

| ESW: Application of Number Entry Level 1  |  |                    |
|---|--|--------------------|
| Skill/s to be developed   | Context  | Portfolio Evidence |
| <b>NE1.1 Understanding numerical data</b>   |  |                    |
| NE1.1.1 Confirming that you understand <u>a given practical problem or task</u> involving numbers or measures.                        | Confirming your understanding of the <b>problem/task</b> of <b>problem/task</b> , how you will tackle it and obtaining given data from relevant sources. |                    |
| NE1.1.2 Confirming <u>with an appropriate person</u> how you will tackle the problem or task.   |  |                    |
| NE1.1.3 Reading and understanding <u>given data</u> from <u>two sources</u> to meet the purpose of your task                          |  |                    |
| <b>NE1.2 Carrying out calculations</b>  |  |                    |
| NE1.2.1 Using the data you have obtained to carry out calculations to do with <u>amounts or sizes</u> that are relevant to your task. | Using appropriate methods and carrying out calculations to get the results needed in the <b>problem/task</b> of <b>problem/task</b> .                    |                    |
| <b>NE1.3 Interpreting results and presenting findings</b>   |  |                    |
| NE1.3.1 Presenting your findings  | Presenting and describing results about the <b>problem/task</b> you were given and showing how the findings meet the purpose of the <b>problem/task</b>  |                    |
| NE1.3.2 Showing <u>how</u> the results meet the purpose of the problem or task.   |  |                    |

NB At Entry level 1 candidates must

Understand and tackle a problem or task → read and understand data → carry out calculations → check results → present findings

All calculations should ideally be set in a purposeful context, although alone exercises are acceptable.

## ESW PLANNING DOCUMENTS – APPLICATION OF NUMBER

| ESW: Application of Number Entry Level 2   |  |                    |
|--|--|--------------------|
| Skill/s to be developed  | Context  | Portfolio Evidence |
| <b>NE2.1 Understanding numerical data</b>  |  |                    |
| NE2.1.1 <u>Confirming</u> that you understand a <u>given</u> practical problem or task involving numbers, measures and simple shapes       | Confirming understanding of the <b>problem/task</b> of <b>problem/task</b> , and how to tackle it and recording relevant data to meet the purpose of the <b>problem/task</b> . |                    |
| NE2.1.2 Confirming how you will tackle it.   |  |                    |
| NE2.1.3 Reading, understanding and recording data from two different sources, including a simple diagram, to meet the purpose of your task |  |                    |
| <b>NE2.2 Carrying out calculations</b>   |  |                    |
| NE2.2.1 Using the data you have obtained to carry out calculations to do with amounts or sizes that are relevant to your task              | Using appropriate methods and carrying out calculations to get the results needed in the <b>problem/task</b> of <b>problem/task</b> .  |                    |
| <b>NE2.3 Interpreting results and presenting findings</b>  |  |                    |
| NE2.3.1 Presenting findings to a <u>familiar audience</u> using charts, graphs or diagrams   | Presenting findings about <b>problem/task</b> and showing how they meet the purpose of <b>problem/task</b> .   |                    |
| NE2.3.2 Describing <u>what the results mean</u> and <u>explaining how they meet the purpose</u> of the problem or task.                    |  |                    |

NB At Entry Level 3 candidates must

Understand and tackle a problem or task → read and understand data → carry out calculations → check results → present findings

All your calculations should ideally be set in a purposeful context, although stand-alone exercises are acceptable.

## ESW PLANNING DOCUMENTS – APPLICATION OF NUMBER

| ESW: Application of Number Entry Level 3   |   |                    |
|--|---|--------------------|
| Skill/s to be developed  | Context   | Portfolio Evidence |
| <b>NE3.1 Understanding numerical data</b>  |   |                    |
| NE3.1.1 Understanding and describing a given problem or task.  | Confirming understanding of a given <b>problem/task</b> of <b>problem/task</b> , confirming how to tackle it and obtaining relevant data. |                    |
| NE3.1.2 Agreeing with an appropriate person how to tackle the problem or task.   |   |                    |
| NE3.1.3 Obtaining relevant numerical data from <u>at least two sources</u> to meet the purpose of the problem or task.   |   |                    |
| <b>NE3.2 Carrying out calculations</b>   |   |                    |
| NE3.2.1 Using appropriate methods to get the results needed and describing the methods used.   | Using appropriate methods and carrying out calculations to get the results needed in the <b>problem/task</b> of <b>problem/task</b> .     |                    |
| NE3.2.1 Using the data and information obtained to carry out calculations relevant to the problem or task to do with: <ul style="list-style-type: none"> <li>a) amounts or sizes</li> <li>b) proportion</li> </ul> |   |                    |
| <b>NE3.3 Interpreting results and presenting findings</b>  |   |                    |
| NE3.3.1 Presenting your findings   | Presenting findings about <b>problem/task</b> and explaining how they meet the purpose of the <b>problem/task</b> .                       |                    |
| NE3.3.2 Explain how your results meet the purpose of the task.   |   |                    |

NB At Entry Level 3 candidates must

Understand and tackle a problem or task → read and understand data → carry out calculations → check results → present findings

All calculations should ideally be set in a purposeful context, although stand-alone exercises are acceptable.

## ESW PLANNING DOCUMENTS – APPLICATION OF NUMBER

| ESW: Application of Number Level 1  |  |                    |
|---|--|--------------------|
| Skill/s to be developed   | Context  | Portfolio Evidence |
| <b>N1.1 Understanding numerical data</b>  |  |                    |
| N1.1.1 Understanding and describing a given problem or task.  | Understanding and describing the <b>problem/task</b> of problem/task, agreeing how to tackle it and obtaining relevant data.   |                    |
| N1.1.2 Agreeing with an appropriate person how to tackle the problem or task.   |  |                    |
| N1.1.3 Obtaining relevant numerical data from <u>at least two sources</u> to meet the purpose of the problem or task.   |  |                    |
| <b>N1.2 Carrying out calculations</b>   |  |                    |
| N1.2.1 Using appropriate methods to get the results needed and describing the methods used.   | Using appropriate methods and carrying out calculations to get the results needed in the <b>problem/task</b> of <b>problem/task</b> .                                      |                    |
| N1.2.2 Using the data and information obtained to carry out calculations relevant to the problem or task to do with: <ul style="list-style-type: none"> <li>a) amounts or sizes</li> <li>b) scales or proportion</li> <li>c) handling statistics</li> </ul> |  |                    |
| <b>N1.3 Interpreting results and presenting findings</b>  |  |                    |
| N1.3.1 Presenting findings to a <u>familiar audience</u> using charts, graphs or diagrams   | Presenting findings about <b>problem/task</b> to an audience of <b>audience</b> , describing what they mean and explain how they meet the purpose of <b>problem/task</b> . |                    |
| N1.3.2 Describing <u>what the results mean and explaining how they meet the purpose</u> of the problem or task.   |  |                    |

**ESW PLANNING DOCUMENTS – APPLICATION OF NUMBER**

NB At level 1 candidates must

Understand and tackle a problem or task → collect and interpret data → carry out calculations → check results → interpret results → present findings .

All activities should ideally be set in a purposeful context, although stand-alone exercises are acceptable.

## ESW PLANNING DOCUMENTS – APPLICATION OF NUMBER

| ESW: Application of Number Level 2   |   |                    |
|--|---|--------------------|
| Skill/s to be developed  | Context   | Portfolio Evidence |
| <b>N2.1 Understanding numerical data</b>   |   |                    |
| N2.1.1 Helping to identify and describe <u>at least one practical problem or task</u> that involves a range of numerical data and information.   | Helping to identify and describe the <b>problem/task</b> of <b>problem/task</b> , confirming how to tackle it and collecting relevant data from a range of sources. |                    |
| N2.1.2 Confirming with an appropriate person <u>a plan</u> to tackle the problem or task.  |   |                    |
| N2.1.3 Collecting relevant numerical data and information from a range of sources to meet the purpose of the problem or task. Sources must include <u>at least two</u> of a table, a chart, a graph or a diagram.  |   |                    |
| <b>N2.2 Carrying out calculations</b>  |   |                    |
| N2.2.1 Using appropriate methods to get the results needed and <u>explaining the methods used</u> .  | Using appropriate methods and carrying out calculations to get the results needed in the <b>problem/task</b> of <b>problem/task</b>                                 |                    |
| N2.2.2 Using the data and information obtained to carry out calculations relevant to the task to do with: <ul style="list-style-type: none"> <li>a) amounts or sizes</li> <li>b) scales or proportion</li> <li>c) handling statistics</li> <li>d) using formulae.</li> </ul> |   |                    |

## ESW PLANNING DOCUMENTS – APPLICATION OF NUMBER

| Skill/s to be developed   | Context   | Portfolio Evidence |
|---|---|--------------------|
| <b>N2.3 Interpreting results and presenting findings</b>  |   |                    |
| N2.3.1 Selecting <u>two different ways</u> to present results, <u>using charts or graphs</u> , and <u>tables or diagrams</u> appropriate to audience.   | Presenting and explaining results about <b>problem/task</b> to an audience of <b>audience</b> in two different ways, explaining methods and how the findings meet the purpose of <b>problem/task</b> and are appropriate to the audience. |                    |
| N2.3.2 Presenting and explaining methods and findings and <u>explaining how they meet the purpose of the task and are appropriate to the audience</u> . |   |                    |

NB At level 2 candidates must demonstrate understanding of the whole process

Understand and tackle a problem or task → collect and interpret data → carry out calculations → check results/interpret results → present findings → reflect review

You must carry out at least one activity that shows your skills in all three components (N2.1, N2.2, N2.3). If you need to carry out additional activities in order to incorporate all the calculation types, the second activity must include tasks for either: N2.1 and N2.2 or N2.2 and N2.3.

## ESW PLANNING DOCUMENTS – APPLICATION OF NUMBER

| ESW: Application of Number Level 3   |  |                    |
|--|--|--------------------|
| Skill/s to be developed  | Context  | Portfolio Evidence |
| <b>N3.1 Understanding numerical data</b>   |  |                    |
| N3.1.1 Identifying, analysing and accurately describing at least one practical problem or task that involves a range of numerical data and information.  | Identifying, analysing and describing the <b>problem/task</b> of <b>problem/task</b> , planning how to tackle it and collecting relevant data from a range of sources. |                    |
| N3.1.2 Planning how to tackle it.  |  |                    |
| 3N.1.3 Collecting relevant numerical data and information from a range of sources to meet the purpose of the task.<br><br>Sources must include <u>at least two</u> of a table, a chart, a graph or a diagram, of which at least <u>one must be complex</u> , and a <u>large data set</u> . |  |                    |
| <b>N3.2 Carrying out calculations</b>  |  |                    |
| N3.2.1 Choosing and using appropriate methods to get the results needed and <u>justifying the methods used</u> .   | Choosing and using appropriate methods and carrying out calculations to get the results needed in the <b>problem/task</b> of <b>problem/task</b>                       |                    |
| N3.2.2 Using the data and information obtained to carry out calculations relevant to the task to do with: <ol style="list-style-type: none"> <li>amounts or sizes</li> <li>scales or proportion</li> <li>handling statistics</li> <li>using formulae</li> </ol>                            |  |                    |

## ESW PLANNING DOCUMENTS – APPLICATION OF NUMBER

| Skill/s to be developed  | Context  | Portfolio Evidence |
|--|--|--------------------|
| <b>N3.3 Interpreting results and presenting findings</b>   |  |                    |
| N3.3.1 <u>Selecting and justifying two different ways</u> to present results, using charts or graphs, and tables or diagrams <u>appropriate to audience.</u> | Presenting and explaining results about <b>problem/task</b> to an audience of <b>audience</b> in two different ways, explaining methods and how the findings meet the purpose of <b>problem/task</b> and are appropriate to the audience. Justifying ways of presenting, methods and findings. |                    |

NB At level 3 candidates must demonstrate understanding of the whole process:

Understand and tackle a problem → collect and interpret data → carry out calculations → check results → interpret results → present findings → reflect review.

You must carry out at least one activity that shows your skills in all three components (N3.1, N3.2, N3.3). If you need to carry out additional activities in order to incorporate all the calculation types, the second activity must include tasks for either: N3.1 and N3.2 or N3.2 and N3.3. Additional activities need meet only the missing requirement(s)

## ESW PLANNING DOCUMENTS – APPLICATION OF NUMBER

| <b>ESW: Application of Number Level 4</b>  |                |                                |
|--|----------------|--------------------------------|
| <b>Skill/s to be developed</b>   | <b>Context</b> | <b>Portfolio Evidence</b>      |
| <b>N4.1 Developing a strategy</b>  |                |                                |
| N4.1.1 developing a strategy for using number skills over an extended period of time   |                |                                |
| <b>N4.2 Monitoring Progress</b>  |                |                                |
| N4.2.1 Monitoring progress and adapting strategy as necessary in order to achieve the quality of outcomes required in involving: <ul style="list-style-type: none"> <li>• Deductive and inferential reasoning</li> <li>• Algebraic modeling</li> </ul> |                |                                |
| <b>N4.3 Presenting outcomes and evaluating strategy</b>  |                |                                |
| N4.3.1 Presenting outcomes of work   |                | Observation template available |
| N4.3.2 Evaluating the effectiveness of your strategy and identifying ways to further develop number skills   |                |                                |

NB Template only provided – candidates must identify relevant strategies.